

CLAIM AMENDMENTS

1. (Currently Amended) A method comprising:
  - establishing a global zone, wherein the global zone is a global in an operating system environment controlled by a single operating system kernel instance that can support execution of one or more processes;
  - establishing at least one a non-global zone within the global zone, wherein the non-global zone is a partition of the global operating system environment, wherein the non-global zone operates as a separate and distinct operating system environment, and wherein the non-global zone can support execution of one or more processes;
  - ~~selectively limiting at least one of visibility and access by processes associated with the global zone to objects within the global zone and select objects within at least one non-global zone; and~~
  - ~~limiting visibility and access by processes associated with each non-global zone to objects within that non-global zone~~
  - isolating a first process executing within the non-global zone to the non-global zone so that the first process does not have visibility or access to processes and objects that are not associated with the non-global zone;
  - permitting a second process executing within the global zone to have visibility and access to processes and objects associated with the global zone; and
  - permitting the second process executing within the global zone to have access to processes and objects associated with the non-global zone, if the second process has a privilege to cross zone boundaries.

2. (Currently Amended) The method of claim 1, ~~wherein visibility and access for~~  
~~processes associated with the global zone defaults to objects within the global zone,~~  
~~the method further comprising:~~  
~~receiving a request from a requesting process associated with the global zone for at~~  
~~least one of visibility and access to an object in a non-global zone;~~  
~~determining whether the requesting process is authorized for the requested at least one~~  
~~of visibility and access; and~~  
~~if the requesting process is authorized, selectively changing at least one of visibility~~  
~~and access for the requesting process in accordance with the request~~  
permitting the second process executing within the global zone to have visibility of  
processes and objects associated with the non-global zone without requiring  
the second process to have the privilege to cross zone boundaries.
  
3. (Currently Amended) The method of claim 1, ~~wherein access for processes associated~~  
~~with the global zone defaults to objects within the global zone and visibility for~~  
~~processes associated with the global zone defaults to objects within the global zone~~  
~~and objects within at least one non-global zone, the method further comprising:~~  
~~receiving a request from a requesting process associated with the global zone for~~  
~~access to an object in a non-global zone~~ the second process executing within  
the global zone to cross zone boundaries; and  
~~if the requesting process is authorized, selectively changing access of the requesting~~  
~~process in accordance with the request~~

granting the second process the privilege to cross zone boundaries, if the second process is authorized to receive such a privilege.

4. (Currently Amended) The method of claim ~~3~~ 1, wherein ~~the request comprises a request for an additional privilege~~ the non-global zone has a first zone identifier associated therewith, wherein processes and objects associated with the non-global zone have the first zone identifier associated therewith, and wherein isolating the first process to the non-global zone comprises:  
allowing the first process executing within the non-global zone to view or access a target process or object only if the target process or object has the first zone identifier associated therewith.
  
5. (Currently Amended) The method of claim ~~3~~ 4, wherein ~~a first process obtains access to objects within the global zone and a second process obtains access to objects within the global zone and at least one non-global zone; and wherein~~ the global zone has a second zone identifier associated therewith, wherein processes and objects associated with the global zone have the second zone identifier associated therewith, and wherein permitting the second process to have visibility and access to processes and objects associated with the global zone comprises:  
~~the global zone is enabled to provide at least one of a default environment and a system wide administrative environment~~  
allowing the second process executing within the global zone to view and access an intended process or object if the intended process or object has the second zone identifier associated therewith.

6. (Currently Amended) The method of claim 1, ~~the method~~ further comprising:  
receiving an identifier indicating a zone selected from at least one of the global zone  
and ~~an~~ the non-global zone; and  
mounting file system resources comprising processes to be executed in the zone  
indicated by the identifier to a portion of a file system associated with the zone  
indicated by the identifier;  
thereby enabling the processes of the file system resources to obtain at least one of  
visibility and access to objects within the zone corresponding to the identifier.
7. (Original) The method of claim 6, wherein the file system resources are mounted to a  
subdirectory of a root directory of a portion of a file system associated with the zone  
indicated by the identifier;  
thereby enabling processes expecting a tree like directory structure to execute within  
the zone indicated by the identifier.
8. (Original) The method of claim 6, further comprising:  
enabling select processes to be visible to all other processes in the global zone and the  
non-global zone.
9. (Currently Amended) The method of claim 4 6, wherein file system resources  
comprise processes to be executed in any zone, the method further comprising:  
receiving a request by a requesting process to access processes in the file system  
resources; and

limiting access to processes in the file system resources based upon the requesting process' relationship with a zone indicated in the request;  
thereby enabling the processes of the file system resources to obtain at least one of visibility and access to objects within the zone corresponding to the identifier.

10. (Original) The method of claim 1, further comprising:  
providing information about the zone with which a process is associated based upon identity of a requesting process and relationship between the requesting process and the zone.
11. Canceled
12. Canceled
13. (Currently Amended) A computer readable storage medium, comprising:  
instructions for causing one or more processors to establish a global zone, wherein the global zone is a global operating system environment that can support execution of one or more processes;  
instructions for causing one or more processors to establish ~~at least one~~ a non-global zone within the global zone, wherein the non-global zone is a partition of the global operating system environment, wherein the non-global zone operates as a separate and distinct operating system environment, and wherein the non-global zone can support execution of one or more processes;

~~instructions for causing one or more processors to selectively limit at least one of  
visibility and access by processes associated with the global zone to objects  
within the global zone and select objects within at least one non-global zone;  
and~~

~~instructions for causing one or more processors to limit visibility and access by  
processes associated with each non-global zone to objects within that non-  
global zone;~~

~~wherein the global zone and the at least one non-global zone exist concurrently in an  
operating system controlled by a single kernel instance~~

~~instructions for causing one or more processors to isolate a first process executing  
within the non-global zone to the non-global zone so that the first process does  
not have visibility or access to processes and objects that are not associated  
with the non-global zone;~~

~~instructions for causing one or more processors to permit a second process executing  
within the global zone to have visibility and access to processes and objects  
associated with the global zone; and~~

~~instructions for causing one or more processors to permit the second process executing  
within the global zone to have access to processes and objects associated with  
the non-global zone, if the second process has a privilege to cross zone  
boundaries.~~

14. (Currently Amended) The computer readable storage medium of claim 13, wherein  
~~visibility and access for processes associated with the global zone defaults to objects~~

~~within the global zone, and wherein the instructions for causing one or more processors to process comprise further comprising:~~

~~instructions for causing one or more processors to receive a request from a requesting process associated with the global zone for at least one of visibility and access to an object in an non-global zone ;~~

~~instructions for causing one or more processors to determine whether the requesting process is authorized for the requested at least one of visibility and access; and~~

~~instructions for causing one or more processors to selectively change at least one of visibility and access for the requesting process in accordance with the request, if the requesting process is authorized~~

~~instructions for causing one or more processors to permit the second process executing within the global zone to have visibility of processes and objects associated with the non-global zone without requiring the second process to have the privilege to cross zone boundaries~~

15. (Currently Amended) The computer readable storage medium of claim 13, wherein ~~access for processes associated with the global zone defaults to objects within the global zone and visibility for processes associated with the global zone defaults to objects within the global zone and objects within at least one non-global zone, and wherein the instructions for causing one or more processors to process comprise~~ further comprising:

instructions for causing one or more processors to receive a request from a requesting process associated with the global zone for access to an object in an non-global zone the second process executing within the global zone to cross zone boundaries; and

instructions for causing one or more processors to selectively change access of the requesting process in accordance with the request, if the requesting process is authorized

granting the second process the privilege to cross zone boundaries, if the second process is authorized to receive such a privilege.

16. (Currently Amended) The computer readable storage medium of claim 45 13, wherein the request comprises a request for an additional privilege the non-global zone has a first zone identifier associated therewith, wherein processes and objects associated with the non-global zone have the first zone identifier associated therewith, and wherein the instructions for causing one or more processors to isolate the first process to the non-global zone comprises:  
instructions for causing one or more processors to allow the first process executing within the non-global zone to view or access a target process or object only if the target process or object has the first zone identifier associated therewith.
  
17. (Currently Amended) The computer readable storage medium of claim 45 16, wherein a first process obtains access to objects within that global zone exclusively and a second process obtains access to objects within the global zone and at least one non-global zone, thereby enabling the global zone has a second zone identifier associated



therewith, wherein processes and objects associated with the global zone have the second zone identifier associated therewith, and wherein the instructions for causing one or more processors to permit the second process to have visibility and access to processes and objects associated with the global zone comprises:

the global zone to provide at least one of a default environment and a system-wide administrative environment

instructions for causing one or more processors to allow the second process executing within the global zone to view and access an intended process or object if the intended process or object has the second zone identifier associated therewith.

18. (Currently Amended) The computer readable storage medium of claim 13, ~~wherein~~  
~~the instructions for causing one or more processors to process comprise further~~  
comprising:

instructions for causing one or more processors to receive an identifier indicating a  
zone selected from at least one of the global zone and ~~an~~ the non-global zone;  
and

instructions for causing one or more processors to mount file system resources  
comprising processes to be executed in the zone indicated by the identifier to a  
portion of a file system associated with the zone indicated by the identifier.

19. (Currently Amended) The computer readable storage medium of claim 18, wherein  
the file system resources are mounted to a subdirectory of a root directory of a portion  
of a file system associated with the zone indicated by the identifier;

thereby enabling processes expecting a tree like directory structure to execute within the zone indicated by the identifier.

20. (Currently Amended) The computer readable storage medium of claim 18, ~~wherein the instructions for causing one or more processors to process comprise further~~ comprising:

instructions for causing one or more processors to enable select processes to be visible to all other processes in the global zone and the non-global zone.

21. (Currently Amended) The computer readable storage medium of claim ~~43~~ 18, wherein file system resources comprise processes to be executed in any zone, and wherein the ~~instructions for causing one or more processors to process comprise~~ computer readable storage medium further comprises:

instructions for causing one or more processors to receive a request by a requesting process to access processes in the file system resources; and  
instructions for causing one or more processors to limit access to processes in the file system resources based upon a requesting process' relationship with a zone indicated in the request.

22. (Currently Amended) The computer readable storage medium of claim 13, ~~wherein the instructions for causing one or more processors to process comprise further~~ comprising:

instructions for causing one or more processors to provide information about the zone with which a process is associated based upon identity of a requesting process and relationship between the requesting process and the zone.

23. Canceled

24. Canceled

25. (Currently Amended) An apparatus, comprising:

~~a means for establishing a global zone;~~

~~a means for establishing at least one non-global zone;~~

~~a means for selectively limiting at least one of visibility and access by processes associated with the global zone to objects within the global zone and select objects within at least one non-global zone; and~~

~~a means for limiting visibility and access by processes associated with each non-global zone to objects within that zone~~

means for establishing a global zone, wherein the global zone is a global operating system environment that can support execution of one or more processes;

means for establishing a non-global zone within the global zone, wherein the non-global zone is a partition of the global operating system environment, wherein the non-global zone operates as a separate and distinct operating system environment, and wherein the non-global zone can support execution of one or more processes;

means for isolating a first process executing within the non-global zone to the non-global zone so that the first process does not have visibility or access to processes and objects that are not associated with the non-global zone;  
means for permitting a second process executing within the global zone to have visibility and access to processes and objects associated with the global zone;  
and  
means for permitting the second process executing within the global zone to have access to processes and objects associated with the non-global zone, if the second process has a privilege to cross zone boundaries.

26. Canceled

27. (Currently Amended) A system, comprising:

~~a processor; and~~

~~a memory connected with the processor, and operative to hold at least one of a plurality of program processes, including:~~

~~instructions for providing an operating system;~~

~~instructions for establishing and managing a plurality of zones within the operating system under control of a single kernel instance, including:~~

~~instructions for creating a global zone and at least one non-global zone;~~

~~instructions for permitting processes attached to the global zone to view and access objects in the global zone and view objects in non-global zones;~~

~~instructions for permitting processes attached to the non-global zone to view and access objects only in the non-global zone; and~~

~~instructions for selectively permitting upon authorized request, a process  
attached to the global zone to access objects in a non-global zone.~~

one or more processors; and

a storage comprising:

instructions for causing the one or more processors to establish a global zone,  
wherein the global zone is a global operating system environment that  
can support execution of one or more processes;

instructions for causing the one or more processors to establish a non-global  
zone within the global zone, wherein the non-global zone is a partition  
of the global operating system environment, wherein the non-global  
zone operates as a separate and distinct operating system environment,  
and wherein the non-global zone can support execution of one or more  
processes;

instructions for causing the one or more processors to isolate a first process  
executing within the non-global zone to the non-global zone so that the  
first process does not have visibility or access to processes and objects  
that are not associated with the non-global zone;

instructions for causing the one or more processors to permit a second process  
executing within the global zone to have visibility and access to  
processes and objects associated with the global zone; and

instructions for causing the one or more processors to permit the second  
process executing within the global zone to have access to processes  
and objects associated with the non-global zone, if the second process  
has a privilege to cross zone boundaries.